WHAT IS CLAIMED IS:

SUB A1

1. A method of maintaining activity in a router to keep the router from entering a lock-up state, comprising the steps of:

(a) sending via the router a request to which a response is expected;

(b) determining whether the response has been received;

(c) if no response has been received, displaying a notification message indicating that network access is unavailable; and

(d) periodically repeating at least steps (a) and (b).

2. The method of claim 1, wherein the request comprises a ping command.

3. The method of claim 1, wherein an Internet Protocol (IP) address is used as a destination for a ping command.

4. The method of claim 1, wherein the request comprises a primary Internet Protocol (IP) address and a secondary IP address that are used in conjunction with a ping command.

5. The method of claim 1, wherein the step of displaying a notification message comprises a pop-up window.

6. The method of claim 1, wherein the method is implemented with one of computer software, firmware, or a combination thereof.

7. The method of claim 6, wherein the software is downloaded from the Internet.

8. The method of claim 1, further comprising the step of determining if on an immediately preceding iteration no response was received and, if so, displaying a notification message indicating that network access has been restored.

9. The method of claim 1, wherein the network is the Internet.

10. In a network having a plurality of computers in communication with a router, the router being in communication with a Digital Subscriber Line (DSL), the DSL carrying data to and from at least one of the plurality of computers over the Internet and carrying voice signals to and from a telephone, a method of keeping the router in an operable state, comprising the steps of:

(a) periodically sending from at least one of the computers a request to which a response is expected, the request being sent through the router;

(b) determining if the response is received;

(c) displaying a first notification message when no response is received; and

(d) displaying a second notification message when the response is received.

11. The method of claim 10, wherein the request is sent every 5-10 minutes.

12. The method of claim 10, wherein the request comprises a ping command.

13. The method of claim 12, wherein an Internet Protocol (IP) address is used as a destination for the ping command.

14. The method of claim 10, wherein the request comprises a primary Internet Protocol (IP) address and a secondary IP address that are used in conjunction with a ping command.

15. The method of claim 10, wherein the step of displaying a notification message comprises a pop-up window.

16. The method of claim 10, wherein the method is implemented with one of computer software, firmware, or a combination thereof.

17. The method of claim 16, wherein the computer software is operable within a multi-tasking computer operating system.

18. The method of claim 16, wherein the computer software, firmware or combination thereof is automatically launched when the computer is booted.

19. The method of claim 16, wherein the software is downloaded from the Internet.

20. A method of notifying a user of the status of his Internet access, comprising the steps of:

(a) pinging an Internet Protocol (IP) address from a computer connected to a local area network which is in turn connected to a router;

(b) determining if a response to the pinging is received; and

(c) displaying a first message indicating that the user's Internet access is unavailable if no response is received, and displaying a second message indicating that the user's Internet access is restored when a response is received, after not receiving a response to a previous pinging.

21. The method of claim 20, wherein steps (a)-(c) are automatically repeated.

22. The method of claim 21, wherein repeated pinging keeps the router from entering a lock-up state.

23. The method of claim 20, wherein the method is implemented in one of software, firmware, or a combination thereof.

24. The method of claim 23, wherein the software is downloaded from the Internet.

25. The method of claim 23, wherein the computer software, firmware or a combination thereof is automatically launched when the computer is booted.

26. The method of claim 20, wherein the computer software is operable within a multi-tasking computer operating system.

27. In a network having a plurality of computers in communication with a router, the router being in communication with a Digital Subscriber Line (DSL), the DSL carrying data to and from at least one of the plurality of computers over the Internet and carrying voice signals to and from a telephone, a system for keeping the router in an operable state, comprising:

(a) means for periodically sending from at least one of the computers a request to which a response is expected, the request being sent through the router;

(b) means for determining if the response is received;

(c) means for displaying a first notification message when no response is received; and

(d) means for displaying a second notification message when the response is received.

28. The system of claim 27, wherein the request is sent every 5-10 minutes.

29. The system of claim 27, wherein the request comprises a ping command.

30. The system of claim 29, wherein an Internet Protocol (IP) address is used as a destination for the ping command.

31. The system of claim 27, wherein the request comprises a primary Internet Protocol (IP) address and a secondary IP address that are used in conjunction with a ping command.

32. The system of claim 27, wherein the notification message is in the form of a pop-up window.

33. The system of claim 27, wherein the means for elements (a)-(d) comprises one of computer software, firmware, or a combination thereof.

34. The system of claim 33, wherein the computer software, firmware or the combination thereof is operable within a multi-tasking computer operating system.

35. The system of claim 33, wherein the computer software, firmware or combination thereof is automatically launched when the computer is booted.